

## Claims

1. (currently amended) A flame retarding and smoke suppressing additive powder, comprising, by weight:

a carbonific material 10.0-12.0%, in which the carbonific material is selected from the group consisting of dipentaerythritol, pentaerythritol polyurethane, phenol, triethylene glycol, resorcinol, inositol, sorbitol, dextrin, and starch;

a heat activated blowing agent 15.5-17.5%, in which the heat activated blowing agent is selected from the group consisting of urea, butyl urea, dicyandiamide, benzene sulfonyl-hydrazide, melamine, chloroparaffin, guanidine, and glycine;

a heat activated halogen material 12.0- 17.0% which forms a fire extinguishing halogen gas under heat, in which the heat activated halogen material is selected from the group of chlorinated paraffin by weight - 40% and chlorinated paraffin by weight - 70%.;

a phosphate material 30-33.4% which forms water and phosphorous acid when reacting with ~~one or more of~~ the remaining ingredients in the powder under heat; and

an inorganic binder 23.50-29.5%, in which the inorganic binder comprises calcium aluminate cement.

2. (cancelled)

3. (cancelled)

4. (cancelled)

5. (original) The powder of claim 1 wherein the phosphate material is selected from the group consisting of ammonium polyphosphate, tris(2,3-dibromopropyl) phosphate, tris(beta-chloroethyl) phosphate, guanidine phosphate, urea phosphate, melamine phosphate, monoammonium phosphate, diammonium phosphate and mixtures thereof.

6. (cancelled)

7. (withdrawn) The powder of claim 1 further comprising a mixture with a resin wherein the powder is in the range, by weight, of 20-30% and the resin is in the range, by weight, of 70-80%.

8. (withdrawn) The powder of claim 7 wherein the resin is selected from the group of styrenic, olefinic, acrylic, cellulosic, polyester, and polyamide.

9. (withdrawn) The powder of claim 7 wherein the resin is a thermoset resin.

10. (withdrawn) The powder of claim 7 wherein the resin is a curable resin.

11. (withdrawn) The powder of claim 8 wherein the resin is selected from the group of resins consisting of resin used in transfer moldings, bulk moldings, sheet moldings, fiber reinforced polymer pultrusions, compression moldings, vacuum injection moldings, assisted resin transfer moldings, pressure bag moldings, hand lay-ups and spray-ups, filament windings, cold press moldings, continuous laminating, rotational moldings, encapsulations and preimpregnations.

12. (currently amended) A flame retarding and smoke suppressing additive powder for mixing with resins comprising, by weight:

10.0-12.0% of a carbonific comprising of dipentaerythritol, dipentaerythritol, pentaerythritol, pentaerythritol polyurethane, phenol, triethylene glycol, resorcinol, inositol, sorbitol, dextrin, and starch;

15.5-17.5% of a blowing agent comprising malamine;

12.0- 17.0 ~~19.0~~% of a halogen containing materials comprising chlorinated paraffins;

30-33.4% of a phosphorous containing material which is selected from the group consisting of ammonium polyphosphate, tris(2,3-dibromopropyl) phosphate, tris(beta-chloroethyl) phosphate, guanidine phosphate, urea phosphate, melamine phosphate, monoammonium phosphate, diammonium phosphate, and mixtures thereof; and

23.5-29.5% of an inorganic material%, in which the inorganic material comprises ~~selected from the group consisting of~~ calcium aluminate cement, ~~and silica flour, and glass beads.~~